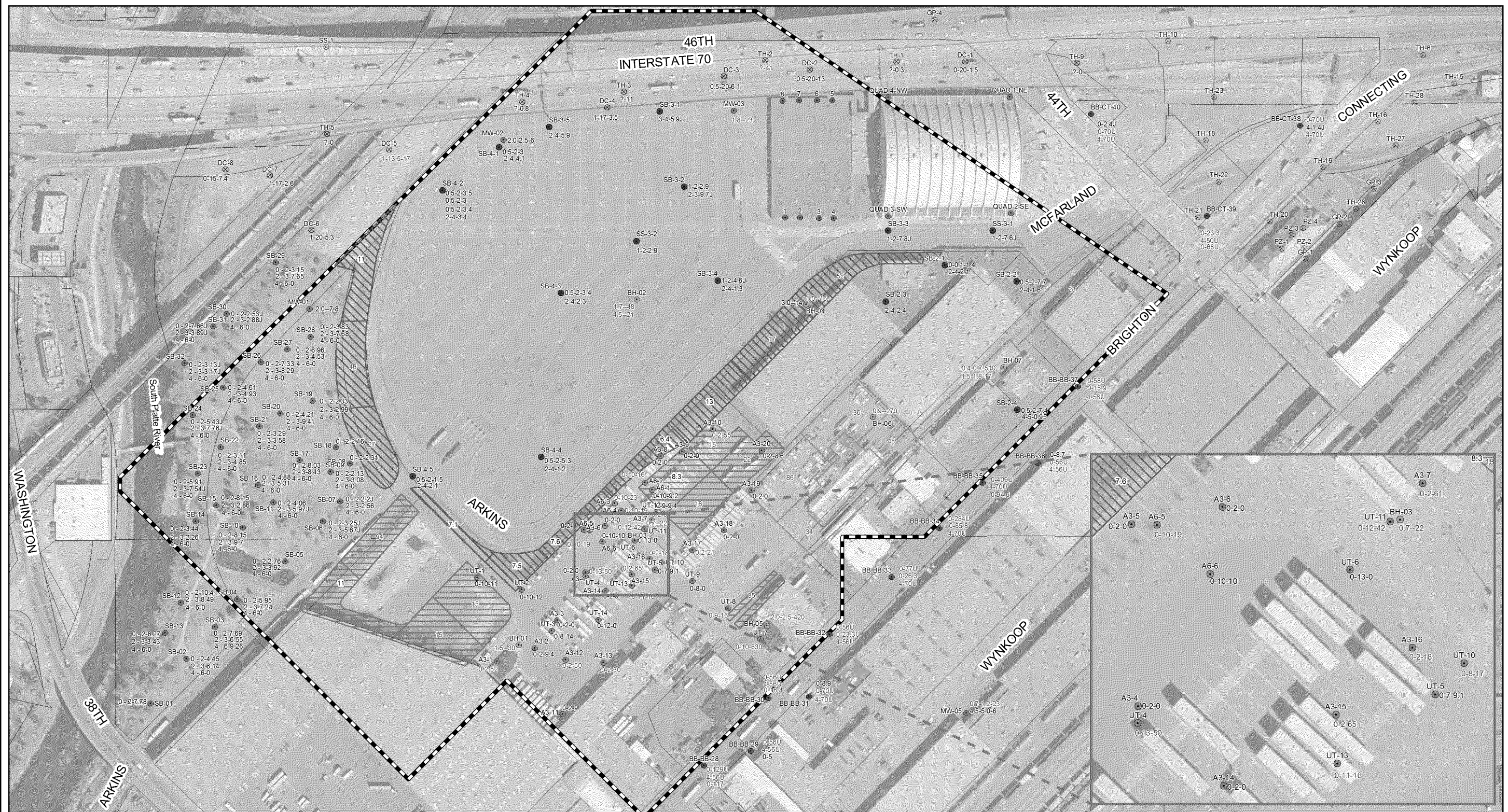


## **WASTE MATERIAL**



# Legend

- 2008 Drilling
- Barn Samples
- Pepsi Area 3 Soil Samples
- Pepsi Area 5 Soil Samples
- Pepsi Area 6 Soil Samples
- BB-BB-xx Holes
- BH Soil Samples
- MW Holes
- QUAD Samples
- SB Soil Samples
- CDOT Holes
- Pepsi UT (Utility Trenches) Soil Locations

## Areal Soil Samples with Addresses

- Parking Restrictor
- 3801 Brighton Blvd
- 4301 Brighton Blvd
- 4375 Brighton Blvd
- 4600 Humbolt

As concentrations exceeding 15 ppm background limit (red)

Depth (ft) - Concentration (ppm)

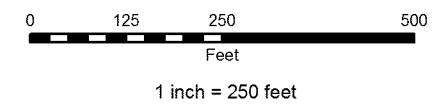
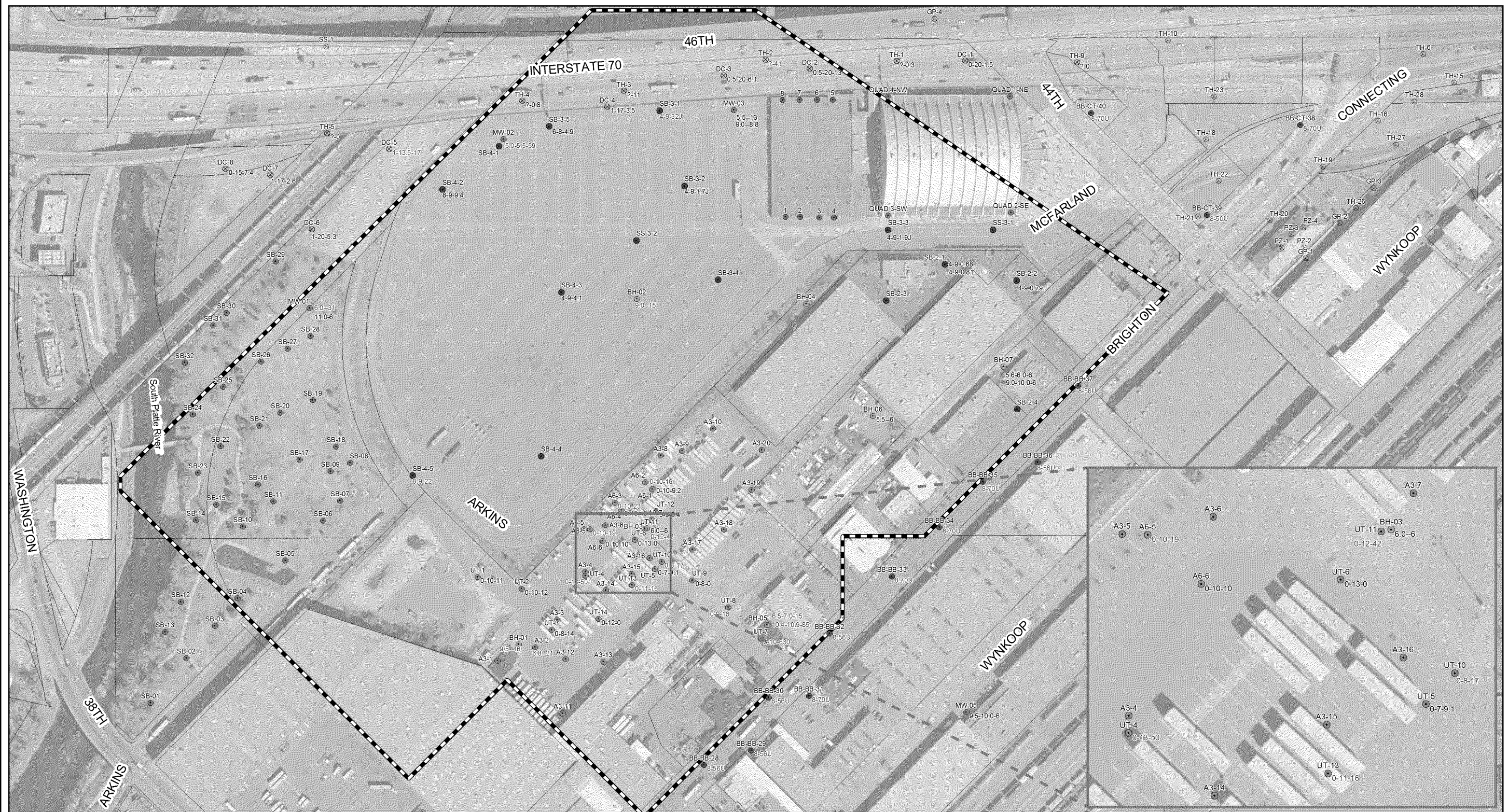


Figure 10  
**Arsenic Soil Sample Concentrations**  
**0 to 5 feet**  
**VB/I-70 Remedial Investigation**

EMSI Engineering Support Management, Inc.





# Legend

- 2008 Drilling
- Barn Samples
- Pepsi Area 3 Soil Samples
- Pepsi Area 5 Soil Samples
- Pepsi Area 6 Soil Samples
- BB-BB-xx Holes
- BH Soil Samples
- MW Holes
- QUAD Samples
- SB Soil Samples
- CDOT Holes
- Pepsi UT (Utility Trenches) Soil Locations

As concentrations exceeding 15 ppm background limit (red)  
Depth (ft) - Concentration (ppm)

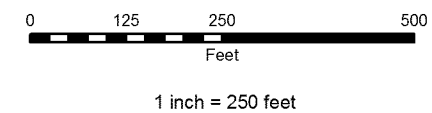
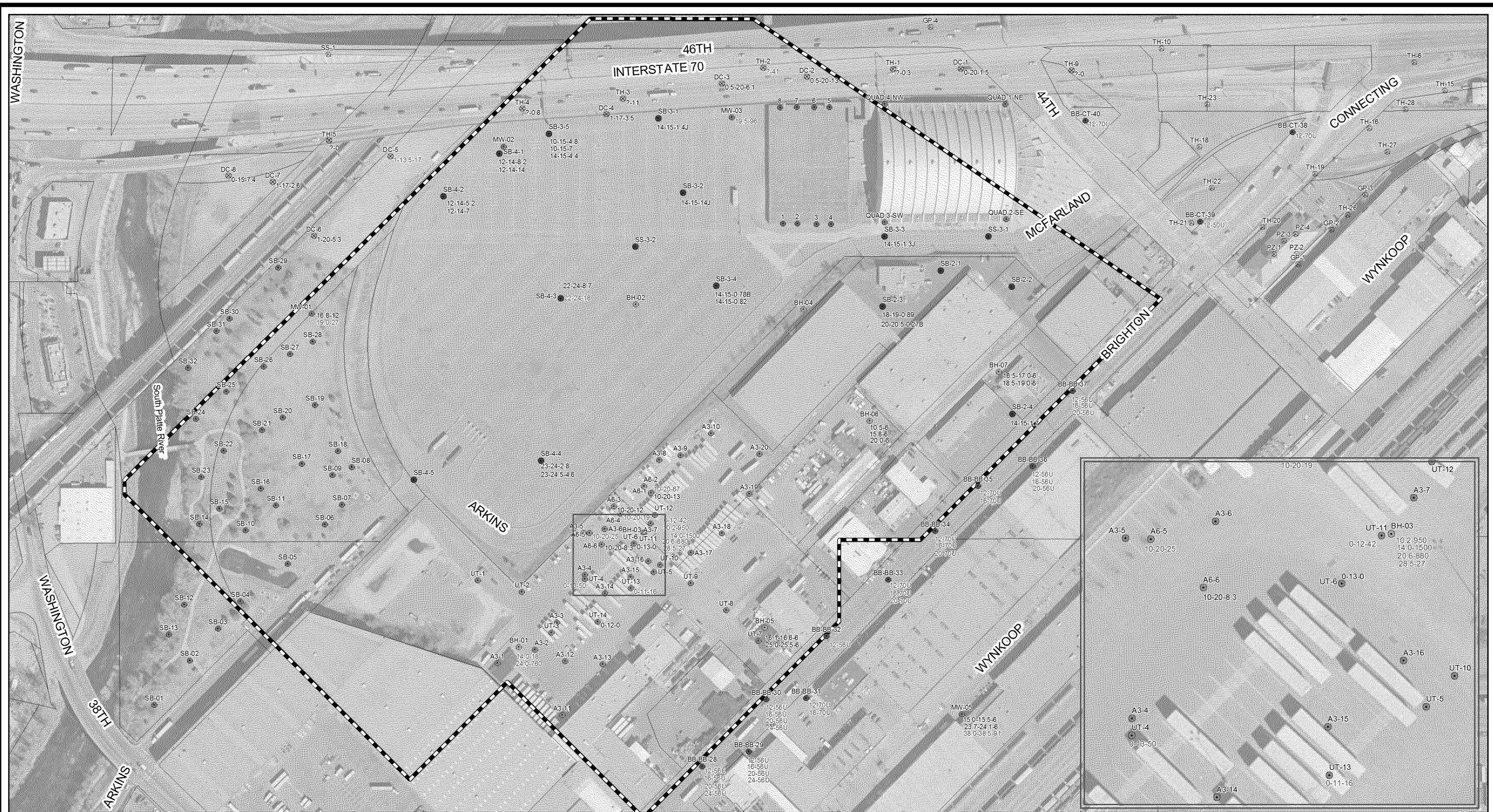


Figure 12  
Arsenic Soil Sample Concentrations  
5 to 10 feet  
VB/I-70 Remedial Investigation

EMSI Engineering Support Management, Inc.





# Legend

- 2008 Drilling
- Barn Samples
- Pepsi Area 3 Soil Samples
- Pepsi Area 5 Soil Samples
- Pepsi Area 6 Soil Samples
- BB-BB-xx Holes
- BH Soil Samples
- MW Holes
- QUAD Samples
- SB Soil Samples
- ⊗ CDOT Holes
- Pepsi UT (Utility Trenches) Soil Locations

As concentrations exceeding 15 ppm background limit (red)

Depth (ft) - Concentration (ppm)

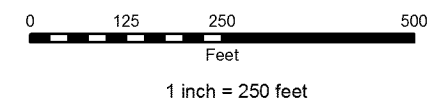
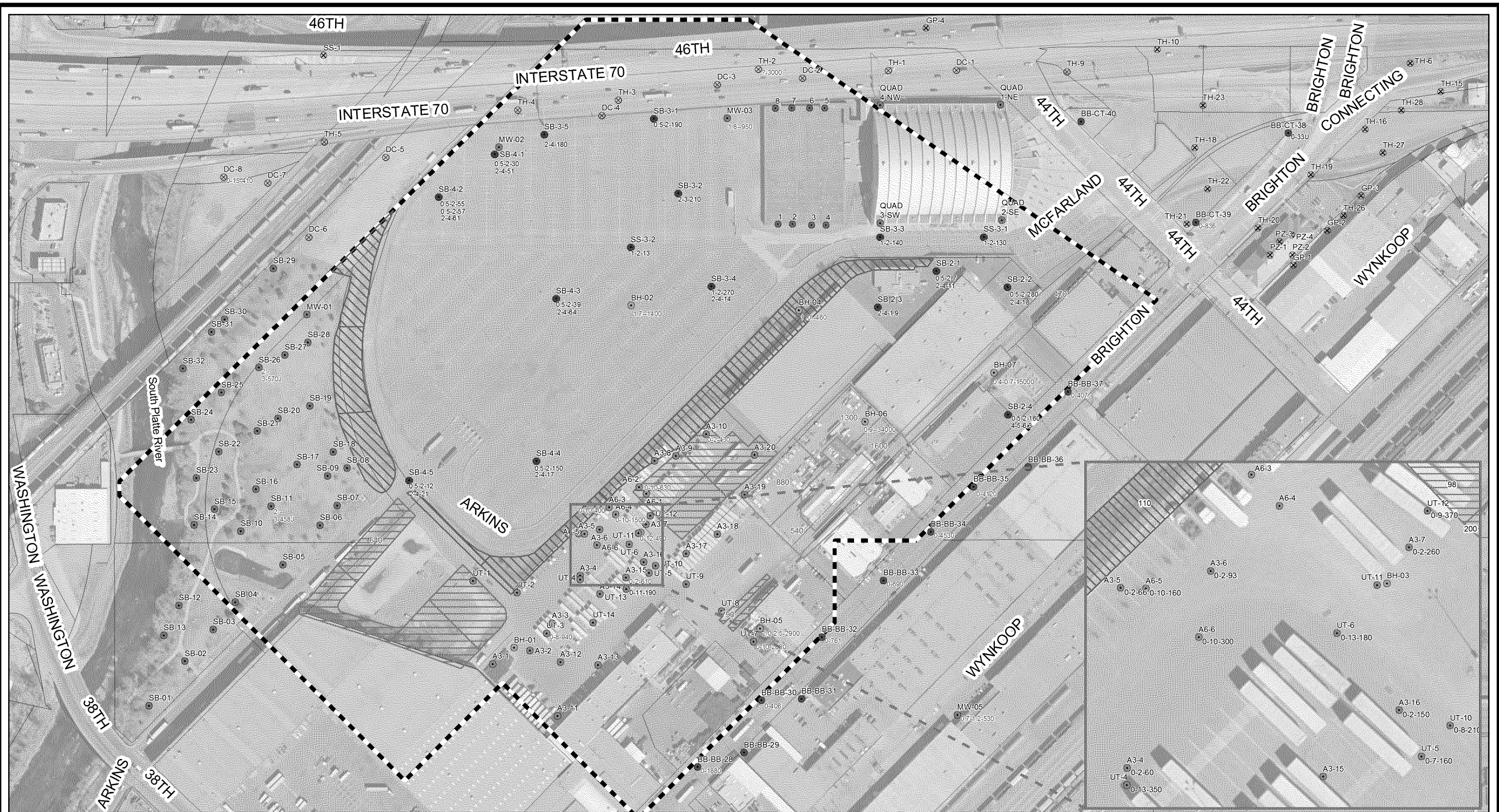


Figure 13  
**Arsenic Soil Sample Concentrations**  
**10 feet and Greater Depth**  
**VB/I-70 Remedial Investigation**

EMSI

Engineering Support Management, Inc.





# Legend

- 2008 Drilling
- Barn Samples
- Pepsi Area 3 Soil Samples
- Pepsi Area 5 Soil Samples
- Pepsi Area 6 Soil Samples
- BB-BB-xx Holes
- BH Soil Samples
- MW Holes
- QUAD Samples
- SB Soil Samples
- CDOT Holes
- Pepsi UT (Utility Trenches) Soil Locations

## Areal Soil Samples with Addresses

- Parking Restrictor
- 3801 Brighton Blvd
- 4301 Brighton Blvd
- 4375 Brighton Blvd
- 4600 Humbolt

Pb concentrations exceeding 400 ppm background limit (red)

Depth (ft) - Concentration (ppm)

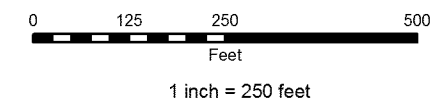
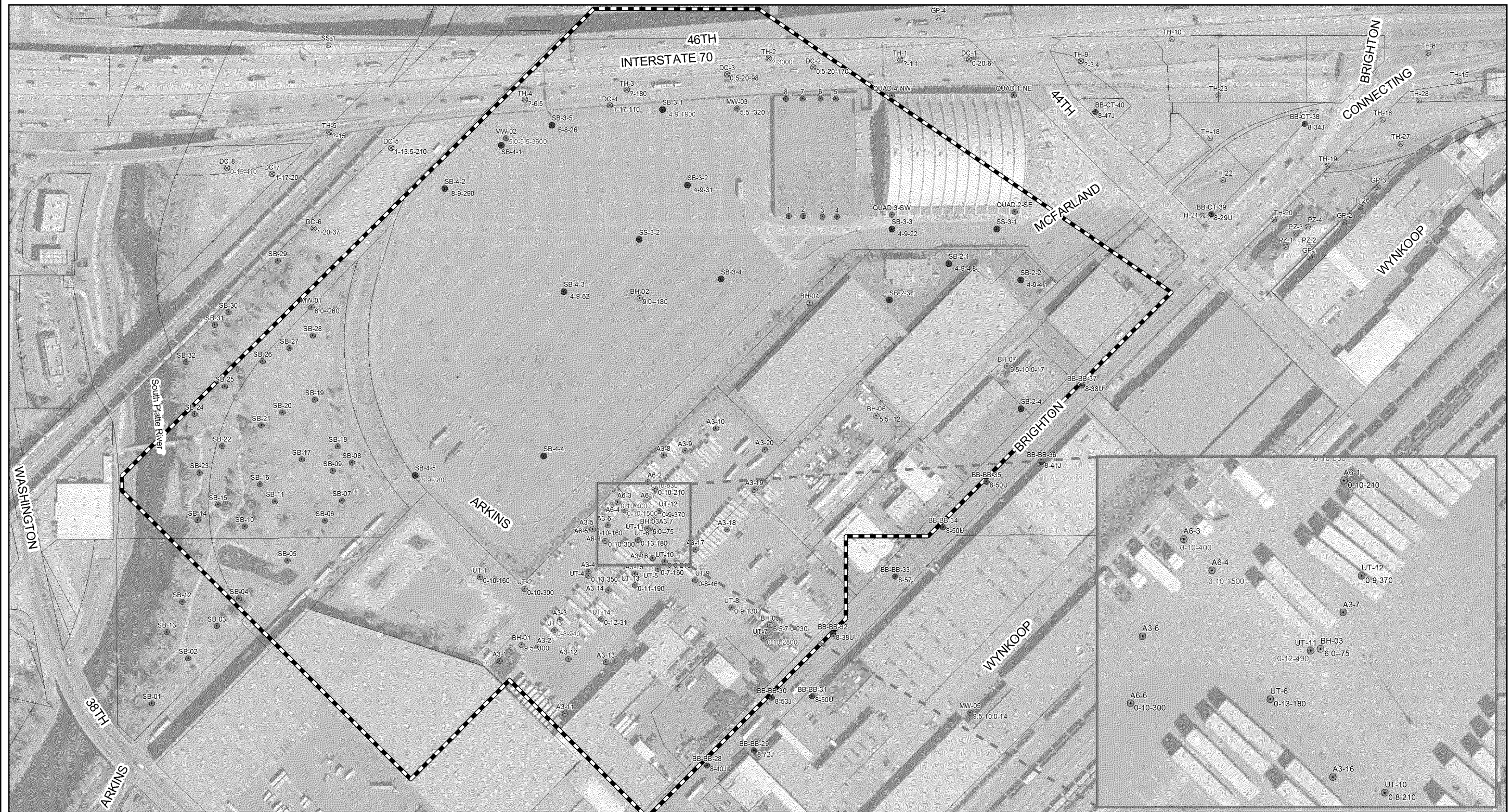


Figure 11  
Lead Soil Sample Concentrations  
0 to 5 feet  
VB/I-70 Remedial Investigation

EMSI Engineering Support Management, Inc.





# Legend

- 2008 Drilling
- Barn Samples
- Pepsi Area 3 Soil Samples
- Pepsi Area 5 Soil Samples
- Pepsi Area 6 Soil Samples
- BB-BB-xx Holes
- BH Soil Samples
- MW Holes
- QUAD Samples
- SB Soil Samples
- ⊗ CDOT Holes
- Pepsi UT (Utility Trenches) Soil Locations

Pb concentrations exceeding 400 ppm background limit (red)

Depth (ft) - Concentration (ppm)

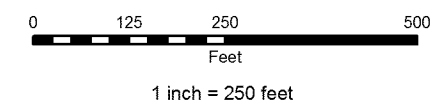


Figure 14  
Lead Soil Sample Concentrations  
5 to 10 feet  
VB/I-70 Remedial Investigation

EMSI Engineering Support Management, Inc.

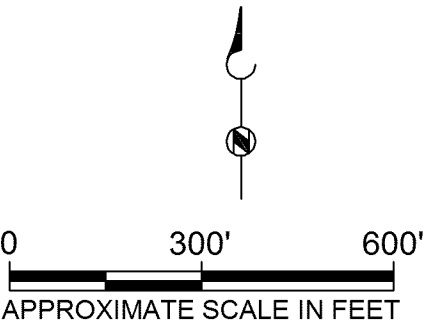
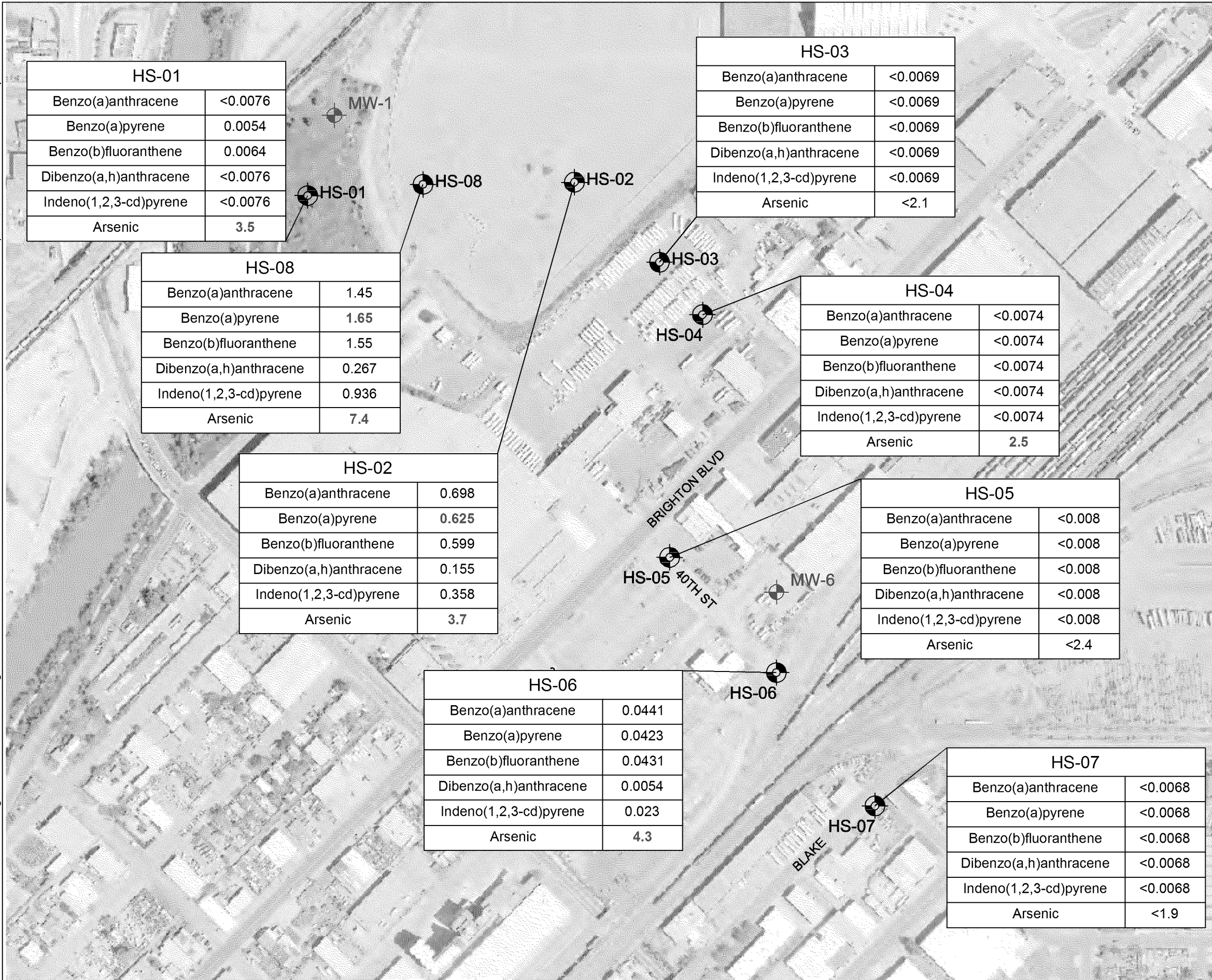




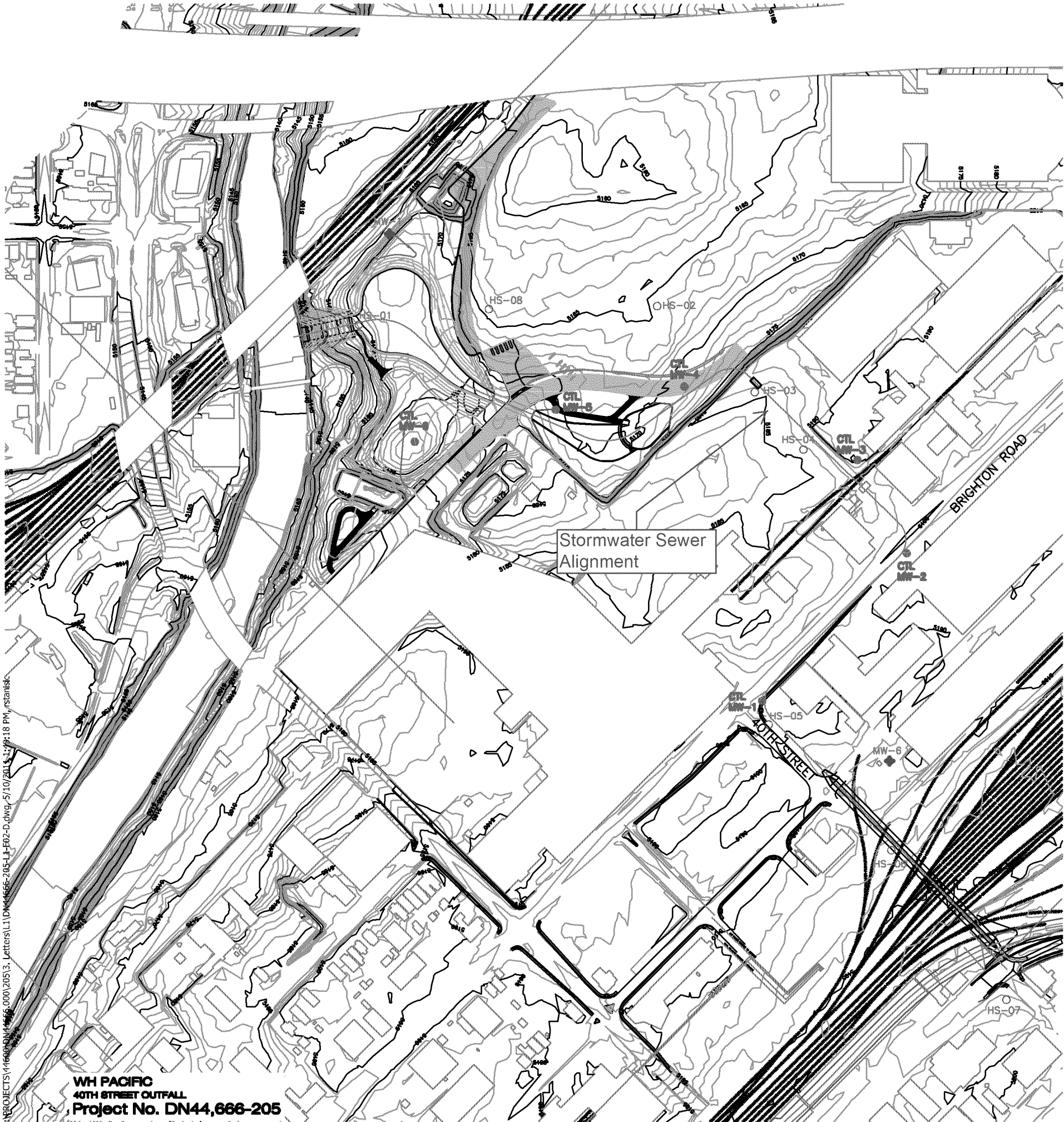


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WH PACIFIC  
40TH STREET OUTFALL  
Project No. DN44,666-205

CTL MW-1		CTL MW-2		CTL MW-3	
ARSENIC	1.6	ARSENIC	2.2	ARSENIC	7.9
CTL MW-4				CTL MW-5	
ARSENIC	6.8			ARSENIC	3.4
P-DICHLOROBENZENE	0.1769				
ETHYLBENZENE	0.163			CTL MW-6	
TOLUENE	0.8693			ARSENIC	11.2
XYLENE	0.483				

HS-01	
BENZO(A)ANTHRACENE	<0.0076
BENZO(A)PYRENE	0.0054
BENZO(B)FLUROANTHENE	0.0064
DIBENZO(A,H)ANTHRACENE	<0.0076
INDENO(1,2,3-CD)PYRENE	<0.0076
ARSENIC	3.5

HS-02	
BENZO(A)ANTHRACENE	0.698
BENZO(A)PYRENE	0.625
BENZO(B)FLUROANTHENE	0.599
DIBENZO(A,H)ANTHRACENE	0.155
INDENO(1,2,3-CD)PYRENE	0.358
ARSENIC	3.7

HS-03	
BENZO(A)ANTHRACENE	<0.0069
BENZO(A)PYRENE	<0.0069
BENZO(B)FLUROANTHENE	<0.0069
DIBENZO(A,H)ANTHRACENE	<0.0069
INDENO(1,2,3-CD)PYRENE	<0.0069
ARSENIC	<2.1

HS-04	
BENZO(A)ANTHRACENE	<0.0074
BENZO(A)PYRENE	<0.0074
BENZO(B)FLUROANTHENE	<0.0074
DIBENZO(A,H)ANTHRACENE	<0.0074
INDENO(1,2,3-CD)PYRENE	<0.0074
ARSENIC	2.5

HS-05	
BENZO(A)ANTHRACENE	<0.008
BENZO(A)PYRENE	<0.008
BENZO(B)FLUROANTHENE	<0.008
DIBENZO(A,H)ANTHRACENE	<0.008
INDENO(1,2,3-CD)PYRENE	<0.008
ARSENIC	<2.4

HS-06	
BENZO(A)ANTHRACENE	0.0441
BENZO(A)PYRENE	0.0423
BENZO(B)FLUROANTHENE	0.0431
DIBENZO(A,H)ANTHRACENE	0.0054
INDENO(1,2,3-CD)PYRENE	0.023
ARSENIC	4.3
LEAD	102
TCLP LEAD	<0.05

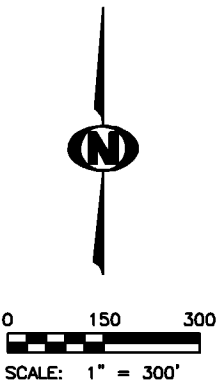
HS-07	
BENZO(A)ANTHRACENE	<0.0068
BENZO(A)PYRENE	<0.0068
BENZO(B)FLUROANTHENE	<0.0068
DIBENZO(A,H)ANTHRACENE	<0.0068
INDENO(1,2,3-CD)PYRENE	<0.0068
ARSENIC	<1.9

HS-08	
BENZO(A)ANTHRACENE	1.45
BENZO(A)PYRENE	1.65
BENZO(B)FLUROANTHENE	1.55
DIBENZO(A,H)ANTHRACENE	0.267
INDENO(1,2,3-CD)PYRENE	0.936
ARSENIC	7.4
LEAD	176
TCLP LEAD	0.94

LEGEND:

- HS-01 SOIL AND GROUNDWATER  
○ SAMPLE LOCATION  
INSTALLED BY BROWN AND  
CALDWELL 2010
- MW-1 SOIL AND GROUNDWATER  
◆ SAMPLE LOCATION INSTALLED  
AS PART OF VB/I-70 OU2  
ASSESSMENTS
- MW-1 CTL MONITORING WELL  
● LOCATION
- 5170 EXISTING GROUND  
SURFACE ELEVATION (FEET)

NOTES: RESULTS PRESENTED IN  
mg/kg MILLIGRAMS/KILOGRAM  
TCLP LEAD RESULTS  
PRESENTED IN mg/L  
MILLIGRAMS/LITER

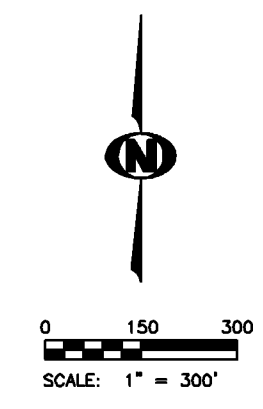


Summary of  
Soil Sample  
Results Fig. 3



- LEGEND:
- HS-01 SOIL AND GROUNDWATER SAMPLE LOCATION INSTALLED BY BROWN AND CALDWELL 2010
  - MW-1 SOIL AND GROUNDWATER SAMPLE LOCATION INSTALLED AS PART OF VB/I-70 OU2 ASSESSMENTS
  - MW-1 CTL MONITORING WELL LOCATION
  - 5170 EXISTING GROUND SURFACE ELEVATION (FEET)

NOTES:  
ND-NONE DETECTED



# Asbestos Sample Results

Fig. 6

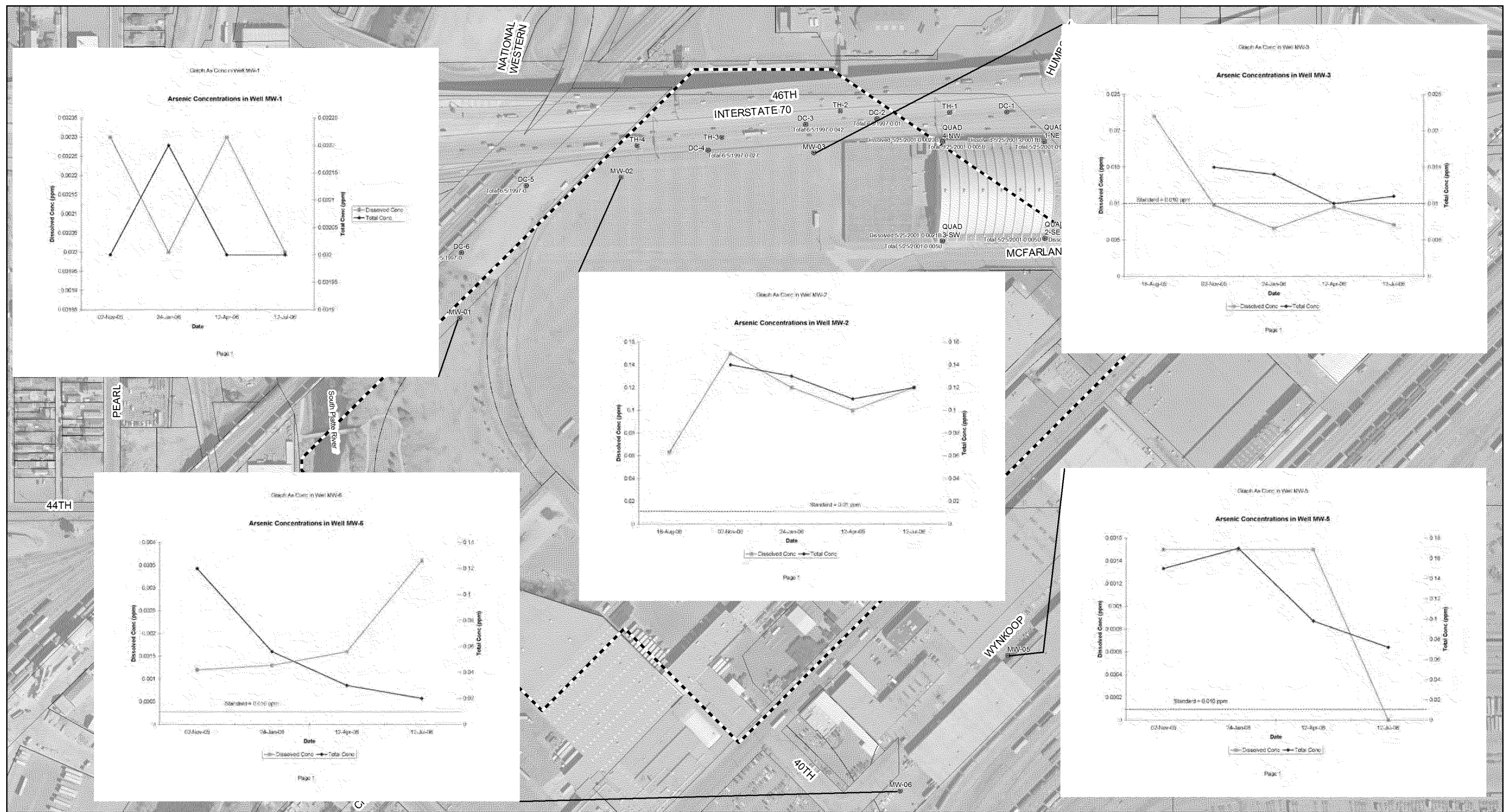
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WH PACIFIC  
40TH STREET OUTFALL  
Project No. DN44,666-205



## **GROUNDWATER**





# Legend

- GW-SampleLocations



1 inch = 300 feet

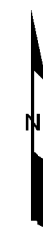
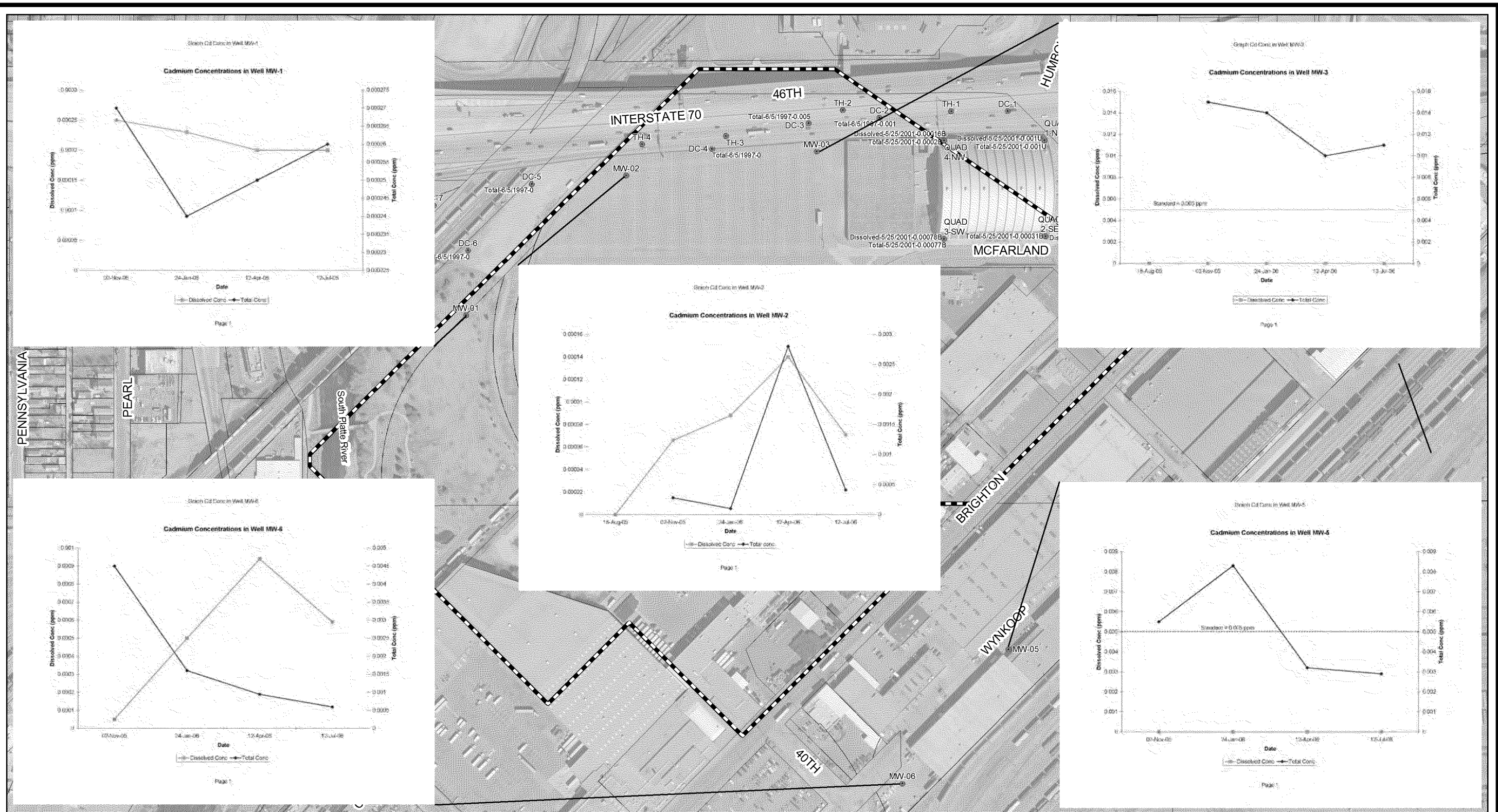


Figure 22  
Arsenic Groundwater Concentrations  
VB/I-70 Remedial Investigation

EMSI Engineering Support Management, Inc.



**Legend**

- Groundwater Sample Locations

0 150 300 600  
Feet

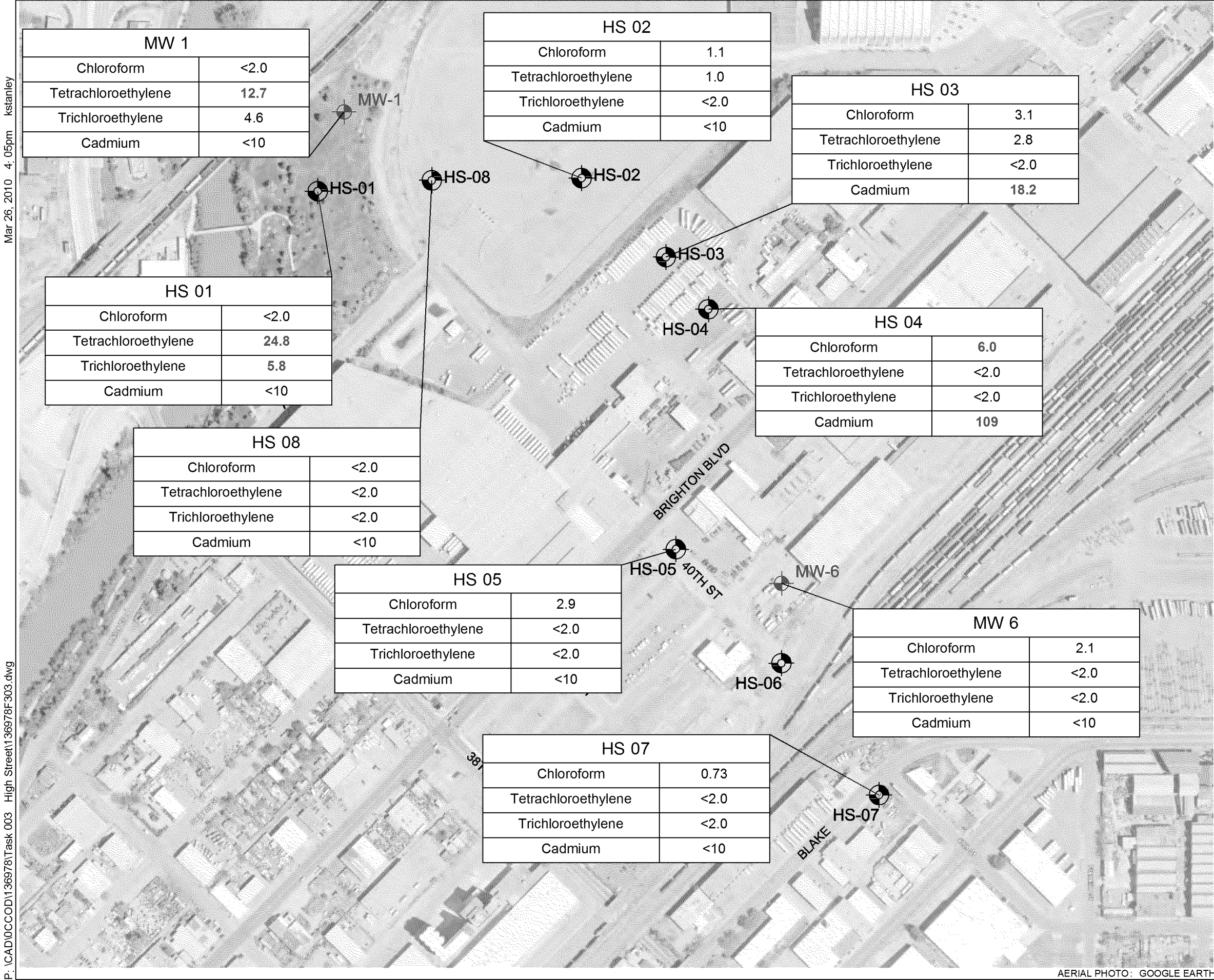
1 inch = 300 feet



Figure 24  
**Cadmium Groundwater Concentrations**  
VB/I-70 Remedial Investigation

EMSI Engineering Support Management, Inc.









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WH PACIFIC  
40TH STREET OUTFALL  
Project No. DN44,666-205

CTL MW-1	
CHLOROFORM	4.1
PCE	1.1
XYLENE	0.99
TOTAL ARSENIC	18.2

CTL MW-2	
CHLOROFORM	1.1
XYLENE	0.61
TOTAL ARSENIC	22.1

CTL MW-3	
CHLOROFORM	2.6
XYLENE	0.73
TOTAL ARSENIC	32.7
DISSOLVED CADMIUM	264
DISSOLVED MANGANESE	92.7

CTL MW-4	
PCE	1.2
CIS-1,2-DCE	0.46
XYLENE	0.75
TOTAL ARSENIC	15.4
DISSOLVED MANGANESE	2140

CTL MW-5	
TOTAL ARSENIC	8.5
DISOLVED IRON	23300
DISSOLVED MANGANESE	775
HEXAVALENT CHROMIUM	<50

CTL MW-6	
PCE	26.3
CIS-1,2-DCE	0.39
TCE	10.0
XELENE	0.71
TOTAL ARSENIC	57.3
DISSOLVED IRON	1000
DISSOLVED MANGANESE	3320
NAPHTHALENE	1.2

HS-01	
CHLOROFORM	<2.0
TETRACHLOROETHYLENE	24.8
TRICHLOROETHYLENE	5.8
CADMIUM	<10

HS-02	
CHLOROFORM	1.1
TETRACHLOROETHYLENE	1.0
TRICHLOROETHYLENE	<2.0
CADMIUM	<10

HS-03	
CHLOROFORM	3.1
TETRACHLOROETHYLENE	2.8
TRICHLOROETHYLENE	<2.0
CADMIUM	18.2

HS-04	
CHLOROFORM	6.0
TETRACHLOROETHYLENE	<2.0
TRICHLOROETHYLENE	<2.0
CADMIUM	109

HS-05	
CHLOROFORM	2.9
TETRACHLOROETHYLENE	<2.0
TRICHLOROETHYLENE	<2.0
CADMIUM	<10

HS-07	
CHLOROFORM	0.73
TETRACHLOROETHYLENE	<2.0
TRICHLOROETHYLENE	<2.0
CADMIUM	<10

HS-08	
CHLOROFORM	<2.0
TETRACHLOROETHYLENE	<2.0
TRICHLOROETHYLENE	<2.0
CADMIUM	<10

MW-1	
CHLOROFORM	<2.0
TETRACHLOROETHYLENE	12.7
TRICHLOROETHYLENE	4.6
CADMIUM	<10

MW-6	
CHLOROFORM	2.1
TETRACHLOROETHYLENE	<2.0
TRICHLOROETHYLENE	<2.0
CADMIUM	<10

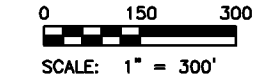
LEGEND:

- HS-01 SOIL AND GROUNDWATER  
○ SAMPLE LOCATION  
INSTALLED BY BROWN AND  
CALDWELL 2010
- MW-1 SOIL AND GROUNDWATER  
◆ SAMPLE LOCATION INSTALLED  
AS PART OF VB/I-70 OU2  
ASSESSMENTS
- MW-1 CTL MONITORING WELL  
● LOCATION
- 5170 EXISTING GROUND  
SURFACE ELEVATION (FEET)

NOTES:

RESULTS PROVIDED IN MICROGRAMS/LITERS  
(ug/L)  
PCE-TETRACHLOROETHENE  
TCE-TRICHLOROETHENE  
CIS-1,2-DCE-CIS-1,2, DICHLOROETHENE  
TOTAL-METAL RESULTS PROVIDED BY  
200.8 ANALYSIS  
DISOLVED-METAL RESULTS PROVIDED BY  
200.7 ANALYSIS  
(SAMPLES LAB FILTERED PRIOR TO ANALYSIS)

Summary of  
Ground Water  
Results Fig. 4







LEGEND:

- HS-01 SOIL AND GROUNDWATER  
SAMPLE LOCATION  
INSTALLED BY BROWN AND  
CALDWELL 2010
- MW-1 SOIL AND GROUNDWATER  
SAMPLE LOCATION INSTALLED  
AS PART OF VB/I-70 OU2  
ASSESSMENTS
- MW-1 CTL MONITORING WELL  
LOCATION
- 5170 EXISTING GROUND  
SURFACE ELEVATION (FEET)

NOTES:

(5185.96) APPROXIMATE GROUND  
WATER ELEVATIONS  
MEASURED APRIL 5, 2011



0 150 300  
SCALE: 1" = 300'

Ground Water  
Elevations Fig. 5

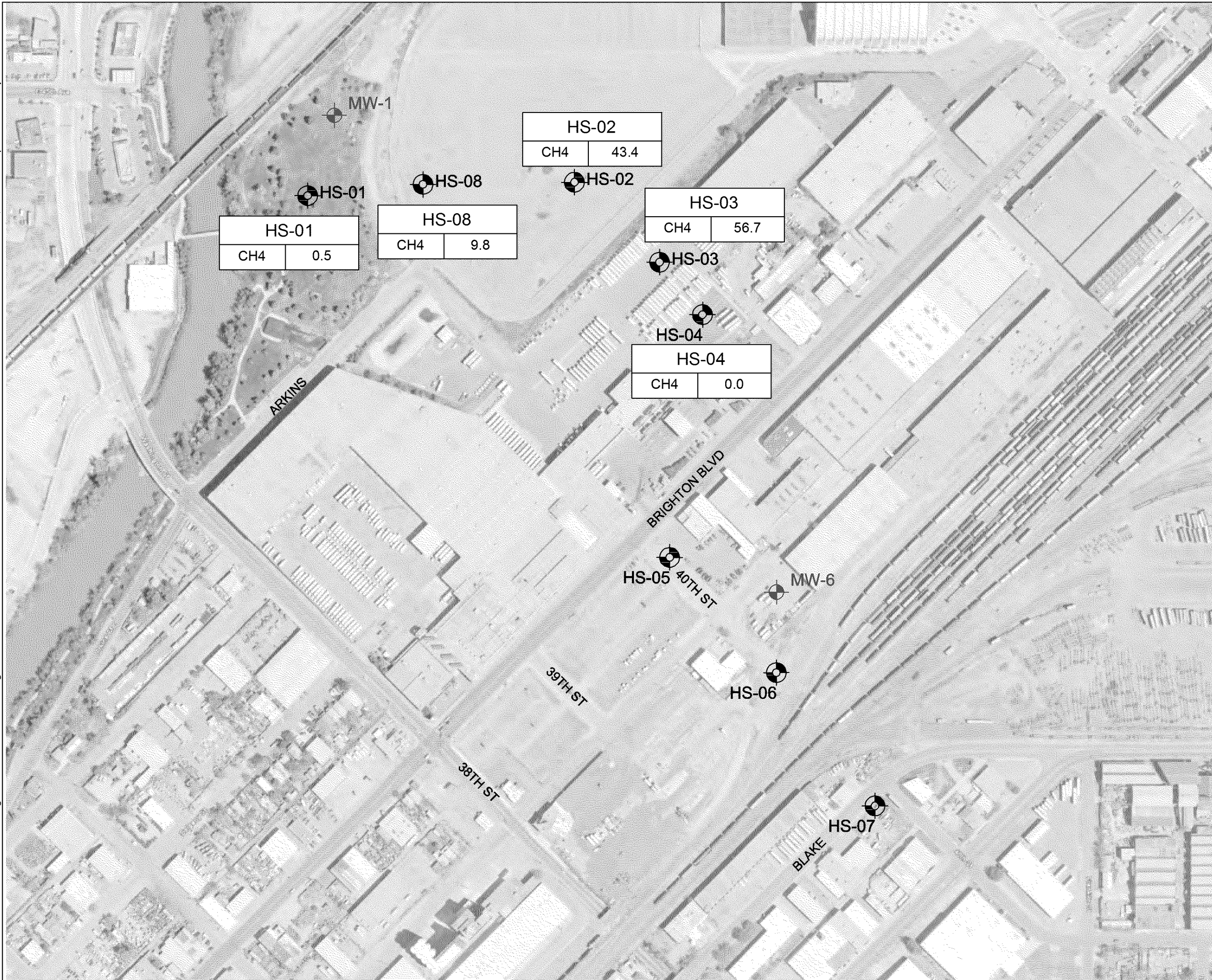
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WH PACIFIC  
40TH STREET OUTFALL  
Project No. DN44,666-205

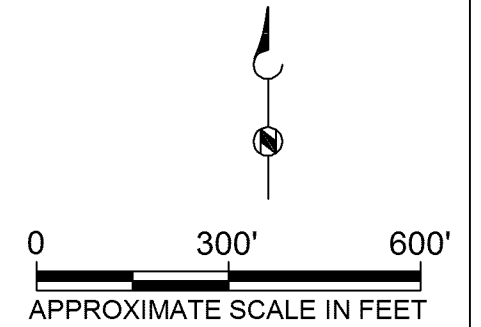


## **SOIL GAS**







AERIAL PHOTO: GOOGLE EARTH



## LEGEND

- HS-07  SOIL AND GROUNDWATER SAMPLE LOCATION
- MW-6  EXISTING MONITORING WELL LOCATION
- CH<sub>4</sub> METHANE SOIL GAS CONCENTRATION (PERCENT OF TOTAL)